NOTES AND NEWS

NOTES ON THE *Salvia leucophylla* COMPLEX (LAMIACEAE) OF CALIFORNIA AND BAJA CALIFORNIA NORTE.—The *Salvia leucophylla* complex includes two species, *S. leucophylla* Greene and *S. chionopeplica* Epling. *Salvia leucophylla* is a member of the Southern California coastal sage scrub formation in the Coast Range foothills of California, from Monterey County southward to the Santa Ana Mountains of eastern Orange County. *Salvia chionopeplica,* a little-known Baja California endemic closely related to *S. leucophylla,* is differentiated by distinct floral and leaf features. Both species share a dendritic pubescence virtually unique to the *Salvia* section in which they belong, and have almost identical inflorescence structure, calyx morphology, and volatile oil components (Neisess, K. R., 1983, Evolution, systematics, and terpene relationships of *Salvia* Section *Audibertia,* Ph.D. diss., Univ. California, Riverside). *Salvia leucophylla* has a uniformly rose-lavender corolla (sometimes very pale) with pollen ranging in color from dusky-yellow to olive-drab, whereas *S. chionopeplica* has a distinctly blue-lavender corolla with bright yellow pollen. Vegetatively, the leaf blades of *S. leucophylla* are usually 3 or more times longer than wide, whereas those of *S. chionopeplica* are usually less than 2.5 times as long as wide. The range of *S. chionopeplica* has been stated to encompass the "western slopes of (the) Sierra San Pedro Martir from the vicinity of San Telmo south to San Fernando" (Wiggins, I. L., 1980, Flora of Baja California, Stanford Univ. Press). An extensive review of collected material deposited in western herbaria (SD, LAM, RSA, PC, OBI, DAV, UNLV, MACF, OSC, ASUC, TUC, UCR, MO, WTU, UTC, CIC, TEX, LL, BRY) indicates, and uniform garden studies confirm, nomenclatural confusion and distortion of the distributional range of both species.

The focal point of this confusion involves a population occurring on Mesa el Barrial, along the road from San Telmo to Meling Ranch in the western foothills of the Sierra San Pedro Martir of Baja California. On-site investigations conducted in August, 1980, established that the leaves of the Barrial plants more closely resembled those of *S. leucophylla,* although somewhat smaller in size. To examine the exact degree of this relationship, seed was collected at the Barrial locality and 24 seedlings were grown under uniform garden conditions at the University of California, Riverside, with like samples of *S. chionopeplica* from the type locality (about 56 km east of El Rosario, near Rancho El Arenoso) and *S. leucophylla* from San Luis Obispo, Los Angeles, and Orange counties. Under these conditions, leaves of the Barrial plants clearly approximated the leaf shape characterizing *S. leucophylla* (Fig. 1). The flowers of these plants matched those of the *S. leucophylla* populations, although they came into bloom about two months earlier.

Hand pollinations, conducted in greenhouse facilities at UC Riverside, proved both species interfertile and self-compatible. Plant association for *S. chionopeplica,* given by Wiggins as creosote bush scrub, is somewhat misleading. Although the area in which *S. chionopeplica* occurs is predominantly creosote bush scrub, the species is usually found in localized, relatively mesic areas (north-facing slopes and summits of hills and small peaks) associated with typical coastal sage scrub species, such as *Eriogonum fasciculatum* Benth., *Lotus scoparius* Ottley, and *Viguiera laciniata* Gray.

Evidently, the Mesa el Barrial population represents a southeastward disjunction of approximately 350 km for *S. leucophylla,* and is not *S. chionopeplica* as assumed previously (Fig. 2). It appears likely that the Mesa el Barriel population of *S. leucophylla* and the closely related *S. chionopeplica* are both remnants of Pleistocene assemblages of coastal sage scrub vegetation.—KURT R. NEISESS, Rancho Santa Ana Botanic Garden, 1500 N. College Ave., Claremont, CA 91711. (Received 3 May 1984; accepted 7 Aug 1985.)

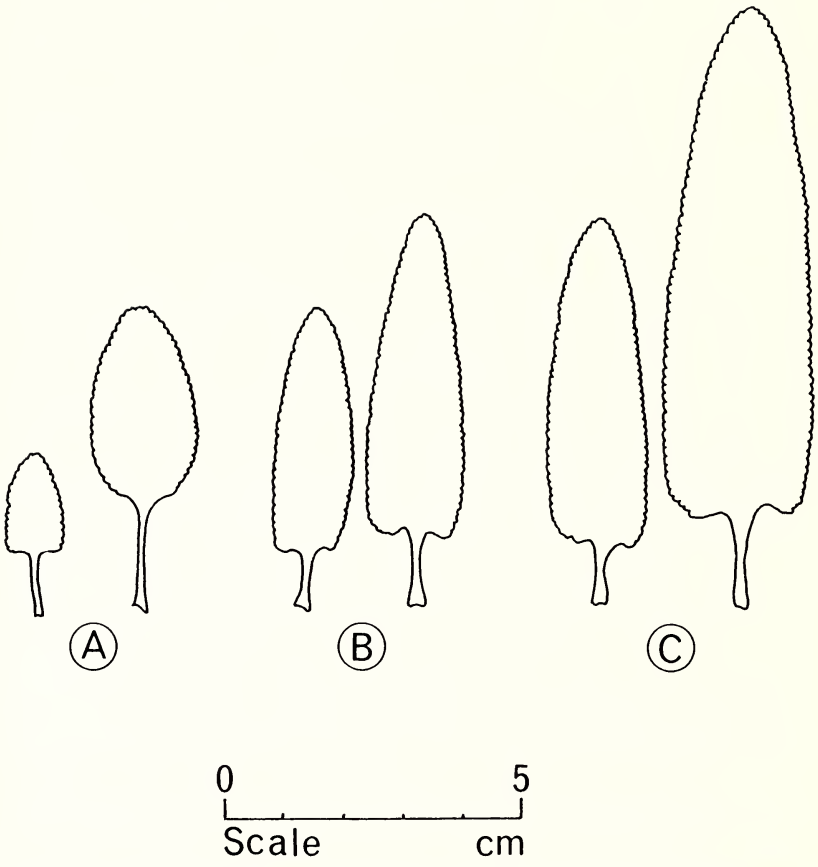

FIG. 1. Leaf variation in *Salvia leucophylla* and *S. chionopeplica.* Pairs represent the range of largest leaf size from each of three representative population samples in the uniform garden study conducted at the University of California, Riverside. A. El Arenoso, Baja California Norte (type locality of *S. chionopeplica*). B. Mesa el Barrial, Baja California Norte (*S. leucophylla*). C. Santiago Canyon, Orange County, California (*S. leucophylla*).

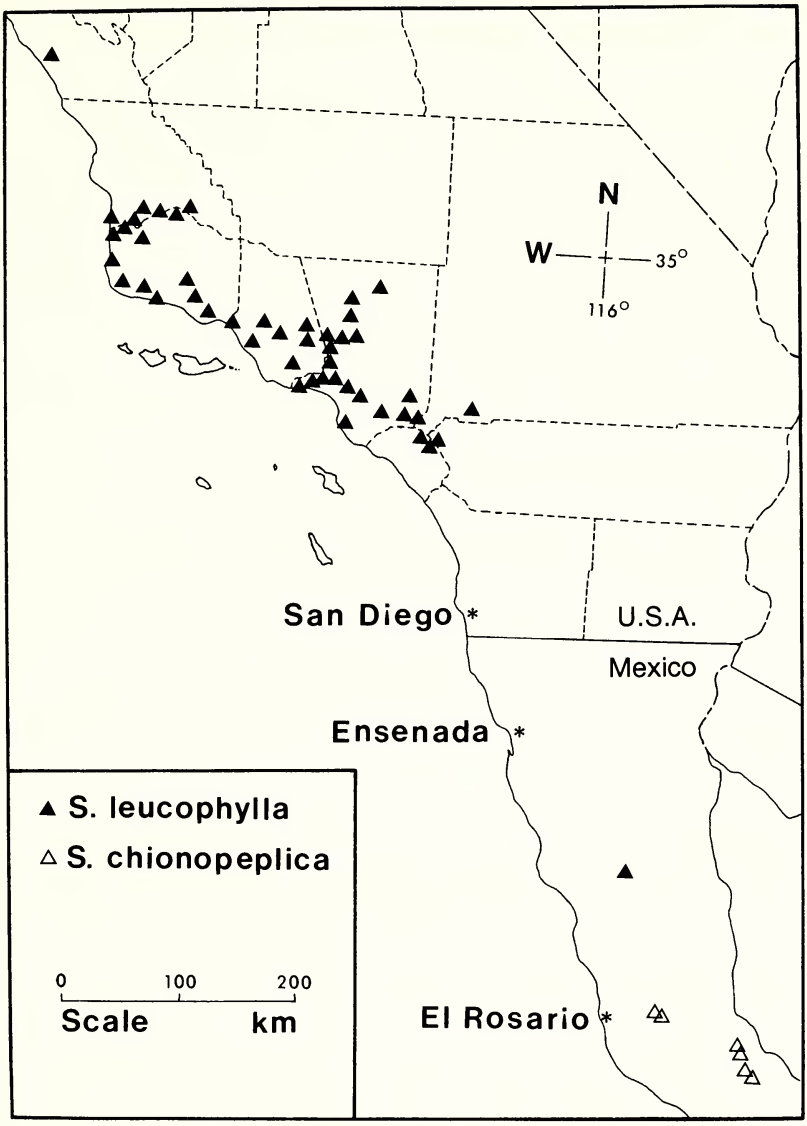

FIG. 2. Distribution of the *Salvia leucophylla* complex.